

layer interposed between said porous resin layer and said resin film, said method comprising the steps of:

applying a first coating composition to a surface of said resin film,

drying said applied first composition to form said thin resin layer on said surface of said film,

applying a second coating composition to a surface of said thin resin layer, and

drying said applied second composition to form said porous resin layer on said surface of said thin resin layer.

--17. (Amended) A heat-sensitive stencil comprising a resin film having provided thereon a material for forming a stencil, said material comprising a thin resin layer, and a porous resin layer formed on said thin resin layer.--

REMARKS

The application has been reviewed in light of the final Office Action dated September 27, 2002. Claims 1-17 are pending in this application, with claims 1, 12, 13, and 15-17 being in independent form. By the present amendment claims 12-15 and 17 have been amended. It is submitted that no new matter has been added and no new issues have been raised by the present amendment.

Claims 1-6, 8-14, and 16-17 have been rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,050,183 to Tanaka et al. Claims 7 and 15 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Tanaka et al. in view of U.S. Patent No. 5,843,560 to Ohta et al. Applicants have carefully considered the

Examiner's comments and the cited art, and respectfully submit that independent claims 1, 12-13, and 15-17 are patentably distinct from the cited art for at least the following reasons.

Independent claim 1 relates to a heat-sensitive stencil comprising a porous resin layer and a resin film laminated on the porous resin layer, and a thin resin layer interposed between the porous resin layer and the resin film.

Pertaining to a first preferred embodiment, the specification of the present application states: "... the thin resin layer forms a continuous integral body together with the porous resin layer so that there is no interface between the thin resin layer and the porous resin layer" (see specification of the present application, p. 3, lns. 28-31).

Furthermore: "[t]he porous resin layer in this embodiment may be regarded as being a single layer having a base portion (providing the thin resin layer) which is in contact with the resin film and which is substantially non-porous and an upper portion having a multiplicity of open pores or cells" (see id., p. 3, ln. 35; p. 4, lns. 1-5).

Tanaka et al., as understood by Applicants, relates to a heat-sensitive stencil, process of fabricating same and method of producing printing master using same. The heat-sensitive stencil includes a porous support and a thermoplastic resin film laminated on the support and having a surface smoothness of at least 10,000 seconds. The stencil is fabricated by bonding the thermoplastic resin film to the porous support with an adhesive having a specific viscosity and a specific volatile matter content, while maintaining each of the support and the film under a specific tension.

As understood by Applicants, the stencil of Tanaka et al. includes a backcoat layer, a porous support layer, a thermoplastic resin film layer, and an overcoat layer (see Tanaka et al., col. 2, lns. 66-67; col. 3, lns. 1-63; Fig. 4). The backcoat layer is provided to improve the rigidity of the stencil and to prevent curling and blocking of the stencil (see

id.), while the overcoat layer functions as an antistatic layer and is provided to prevent sticking between a thermal head and the stencil (see id.).

As noted in the Office Action, Tanaka et al. discloses an adhesive layer interposed between the porous resin layer and the thermoplastic resin film (see Office Action, p. 4, lns. 1-4). The Office Action apparently associates this adhesive layer with the thin resin layer of the present disclosure. Applicants respectfully disagree.

As understood by Applicants, the adhesive layer disclosed by Tanaka et al. and cited in the Office Action (see id.) is a solvent solution of a resin such as an acrylic resin and is interposed between the porous resin layer and the thermoplastic resin film to adhere the porous resin layer to the thermoplastic resin film (see id.; Tanaka et al., col. 7, lns. 42-44).

It is therefore respectfully submitted that Applicants find no teaching or suggestion in the cited references, alone or in combination, of a stencil comprising a porous resin layer and a resin film laminated on the porous resin layer, and a thin resin layer interposed between the porous resin layer and the resin film, as recited in independent claim 1.

Accordingly, Applicants respectfully submit independent claims 1 is patentably distinct from the cited art.

Independent claims 12, 13, and 15-17 are believed to be patentably distinct for at least similar reasons.

In addition, Applicants find no teaching or suggestion in the cited art of applying heat to a wet coating composition containing a resin, a first solvent capable of dissolving the resin, and a second solvent substantially incapable of dissolving the resin at a temperature below a boiling point of the second solvent and sufficient to vaporize at least part of the first solvent, and drying the composition by applying heat to the composition at a temperature sufficient to

completely vaporize the first solvent and the second solvent to form a thin resin layer and a porous layer simultaneously on a surface of a film, as recited in independent claim 13.

The Office is hereby authorized to charge any additional fees that may be required in connection with this response and to credit any overpayment to our Deposit Account No. 03-3125.

If a petition for an additional extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Entry of this response and allowance of this application are respectfully requested.

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 12-15 and 17 have been amended as follows:

--12. (Amended) A stencil printer having a heat-sensitive stencil [as set forth in claim 9], said heat-sensitive stencil being provided with imagewise perforations and comprising a porous resin layer, and a resin film laminated on said porous resin layer, and a thin resin layer interposed between said porous resin layer and said resin film.

--13. (Amended) A method of preparing a heat-sensitive stencil [as set forth in claim 5] comprising a porous resin layer, and a resin film laminated on said porous resin layer, and a thin resin layer interposed between said porous resin layer and said resin film, said thin resin layer and said porous resin layer forming a continuous unitary body, said method comprising the steps of:

applying a wet coating composition to a surface of [a] said resin film, said wet composition containing a resin, a first solvent capable of dissolving said resin, and a second solvent substantially incapable of dissolving said resin; [and]

applying heat to said composition at a temperature below a boiling point of said second solvent and sufficient to vaporize at least part of said first solvent; and

drying said applied composition by applying heat to said composition at a temperature sufficient to completely vaporize said first solvent and said second solvent to form said thin resin layer and said porous layer simultaneously on said surface of said film.

--14. (Amended) A method as set forth in claim [5] 13, wherein the weight ratio of said first resin to said second resin is greater than 1:1.

--15. (Amended) A method of preparing a heat-sensitive stencil [as set forth in claim 1] comprising a porous resin layer, and a resin film laminated on said porous resin layer, and a thin resin layer interposed between said porous resin layer and said resin film, said method comprising the steps of:

applying a first coating composition to a surface of [a] said resin film,
drying said applied first composition to form said thin resin layer on said surface of said film,

applying a second coating composition to a surface of said thin resin layer, and
drying said applied second composition to form said porous resin layer on said surface of said thin resin layer.

--17. (Amended) A heat-sensitive stencil comprising a resin film having provided thereon a material [according to claim 16] for forming a stencil, said material comprising a thin resin layer, and a porous resin layer formed on said thin resin layer.--